DOCUMENT RESUME

ED 042 557 RC 004 620

AUTHOR	Thomas, Katheryn A.; Jacob, Nelson L.
TITLE	A Longitudinal Analysis of Change in Occupational and Educational Orientations of East Texas Boys: A Racial Comparison.
INSTITUTION	Texas Agricultural Experiment Station, College Station.
SPONS AGENCY	Department of Agriculture, Washington, D.C.
PUB DATE	Aug 70
NOTE	42p.; Paper presented at the annual meetings of the Rural Sociological Society (Washington, D. C., August 1970)
EDRS PRICE	EDRS Price MF-$0.25 HC-$2.20
DESCRIPTORS	*Caucasians, Cultural Differences, *Educational Attitudes, Longitudinal Studies, *Negro Students, *Occupational Aspiration, Questionnaires, *Rural Youth, Socioeconomic Background, Tables (Data)
IDENTIFIERS	Texas

ABSTRACT

In this longitudinal study of rural adolescent males (Negro and white), 3 hypotheses were tested: (1) that occupational and educational aspirations of these youth will either be stable at a low level or change downward from higher levels over time, (2) that Negro youth will experience significantly more downward deflection of status projections over time than the white youth, and (3) that incidence of anticipatory goal deflection will decline over time. In 1966, some 484 high school sophomore boys in 3 rural counties in east-central Texas were given a questionnaire. A similar questionnaire was administered to 325 of the original sample in 1968, an additional 71 were contacted personally, and 37 responded to a mailed questicnnaire. Findings indicated that, generally, the higher the occupational aspirations and expectations of white boys the more stable they remained over the time period. The Negro boys' occupational aspirations and expectations lowered over the time period. Negro boys raised their educational goals while those of the white boys remained congruent. In general, occupational aspirations and expectations of both the white and Negro youth appeared more dynamic than their educational status projections. (LS)

ED042557

RECEIVED
AUG 31 1970
NMSU
E.R.I.C.

A LONGITUDINAL ANALYSIS OF CHANGE IN OCCUPATIONAL AND EDUCATIONAL ORIENTATIONS OF EAST TEXAS BOYS: A RACIAL COMPARISON*

Katheryn A. Thomas and Nelson L. Jacob
Texas A&M University

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY.

*Paper presented at the annual meetings of the Rural Sociological Society, Washington, D. C., August, 1970. The research included in this paper was supported by the Texas Agricultural Experiment Station as a contribution to research project H-2611 and USDA (CSRS) project S-61, "Human Resource Development and Mobility in the Rural South." The authors wish to acknowledge the contribution of Dr. William P. Kuvlesky, whose comments and suggestions have contributed significantly to the development of this paper.

RC004620

INTRODUCTION

The orientation taken in most of the empirical research dealing with occupational and educational status projections of youth is to assume that the development of these phenomena is characterized by an orderly and patterned "process."[1] Yet there has been a sad neglect of the systematic investigation of the dynamics of that process. The few empirical efforts that have related occupational and educational projections to subsequent attainment represent at least a token effort at investigation of the dynamics of vocational development[2] (Kuvlesky and Bealer, 1967, and Kuvlesky, 1969b). However, direct investigation of the changes that take place in vocational and related goals as individuals progress toward employment in the labor market is critical to a thorough understanding of the prework phase of vocational development. Reported in this paper are findings from a longitudinal study of rural adolescent males. Specifically, this paper will describe patterns of change or congruency in occupational and educational aspirations and expectations and the discrepancy between these two status projections over a two year period beginning with the sophomore year in high school. Particular emphasis will be placed on racial differences in dynamics of occupational and educational aspirations and expectations.

---

[1] Beilin (1955) has suggested that we approach investigation of empirical studies of this type with one basic distinction in mind. Occupational choice studies are those which focus on a "point in time" status projection whereas vocational development studies are those which focus on the dynamics of the choice process itself. This conceptual distinction will be maintained throughout this paper, the focus of which will be the dynamics of status projections over time.

[2] Vocational development is conceptualized as a developmental process including not only the prework phase of development of orientations toward projected educational and occupational statuses but also the following phases of adjustment to attained statuses. This paper will focus exclusively on the prework phase of vocational development.

Theoretical Framework

A key, although unproved, assumption common to many theoretical models of vocational development, such as those of Ginzberg (1952) and Tiedeman (1961), is that the prework phase is characterized by an orderly, generally irreversible orientation process which leads logically from projected statuses to levels of achievement commensurate with those projections. According to these models, the orientations of individuals who are likely to become part of the labor force at some level and who are consciously aware of that likelihood will follow a general pattern of development in which orientations change from vague notions about work and occupational differentiation to progressively more specific and definite conceptions of the jobs they will be entering. In addition, aspirations and expectations are expected to become more realistic over time. That is, the older the youth, the more likely his aspirations and expectations are to approximate probable levels of attainment. This theoretical model of vocational development implies a general consistency in level of orientations over time for individuals originally expressing realistic orientations, and for those that do not, a shift over time to more realistic levels.

The youth represented in this study live in low-income, economically depressed area of Texas. Consequently, it is assumed that for a large majority of these youth, occupational and educational attainment will be low, at least below the professional occupational level,and, in terms of education, somewhat less than four years of college. If, as theorized, aspirations and expectations do tend to become more realistic over time, we would expect a general downward deflection of status projections which are at the higher levels. Therefore, we have derived for testing in this paper the following hypothesis:

Hypothesis 1. The occupational and educational aspirations of these youth will either be stable at a low level or change downward from higher levels over time.

In addition, census figures (U. S. Bureau of the Census, 1968:110-111; 126-128) indicate a racial differential in occupational and educational achievement levels. The attainment of whites is generally higher than that of Negroes. If the occupational and educational aspirations and expectations of Negroes and whites in early adolescence are similarly high, as past research in the rural South suggests (Lever, 1969; Thomas, 1970), we would expect the following hypothesis to be confirmed:

Hypothesis 2. The Negro youth will experience significantly more downward deflection of status projections over time than the white youth.

Blau and associates (1956) contend that the process of choosing an occupation at the individual level is a product of a compromise between preferences and expectancies. If such is the case, and if we are to utilize Ginzberg's model of successive stages of vocational development from fantasy through tentative through realistic, we may hypothesize that occupational and educational aspirations, i.e., desired statuses, and expectations, i.e., anticipated statuses, should become more congruent as the individual progresses through high school. Any differences in level between aspirations and expectations will diminish over time through a shift in aspirations and/or expectations. The concept, "anticipatory goal deflection," has been coined to refer to the existence of a discrepancy between aspirations and expectations at one point in time (Kuvlesky, 1966). Based upon Blau's theory, we hypothesize in regard to this phenomenon that:

Hypothesis 3. Incidence of anticipatory goal deflection will decline over time.

In addition to evaluation of the foregoing hypotheses, we will analyze the shifts of occupational and educational aspirations and expectations at

each level to determine at what level these status projections tend to be more stable or unstable and to determine the general direction of shifts from the particular levels. Change among more specific categories of these aspirations and expectations will be described briefly in Appendix C.

METHODOLOGY

The respondents included in this sample were first contacted in the spring of 1966. The sample area consisted of three low-income, extremely rural counties in East-Central Texas.[3] All high school sophomores present the day of questionnaire administration in the high schools of these counties were included in the original sample. A follow-up study was conducted in the spring of 1968 at which time all high school seniors in the sample counties were administered a questionnaire highly similar to the original. Additional efforts were made during the summer of 1968 to locate all persons who had been included in the 1966 sample, but for some reason, e.g., absent day of questionnaire administration, dropped out, moved, etc., had not responded to the 1968 questionnaire. A total of 484 persons responded to the 1966 questionnaire. Of those 484, 325 were administered questionnaires in 1968 in group settings highly similar to the setting which existed during questionnaire administration in 1966. Of the remaining 159 who were not contacted in school, 71 were interviewed personally during the summer of 1968. In addition, abbreviated mailed questionnaires were utilized as the final alternative for contacting persons who had moved long distances from home communities or for some other reason proved difficult to contact. The 37 responding in this manner brought

---

[3]Census data from 1960 indicate total county populations ranged between 6,000 and 11,000 for the three counties. Median family incomes ranged between $1,737 and $2,451, as compared with a Texas average of $4,884 that same period.

the total recovery rate to 433 or 89.4% of the original sample. Of those 433 who had responded to both 1966 and 1968 questionnaires, the 215 (87 Negro and 128 white) male respondents were chosen for this analysis. Included are a small percentage of boys who dropped out of school after the 1966 contact.

In regard to the 28 boys who were not recontacted in 1966, a large majority were merely not located. At least four were in military service at the time of the restudy, seven were known to have moved from their home counties, and one had died. Slightly over half were known to be high school dropouts. To determine if the loss of these respondents may have significantly affected the quality of our sample, the 1966 status projections of these youth were compared with the 1966 status projections of the respondents included in this study (Appendix A).

The differences observed between the status projections of those not recontacted in 1968 as opposed to those from whom follow-up data was obtained suggest that the respondent loss resulted in a Negro sample whose 1966 occupational expectations were slightly lower and whose incidence of occupational anticipatory deflection was slightly greater than was the case for the original Negro sample. For the whites, the respondent loss resulted in a sample whose educational aspirations and expectations were slightly higher than among the original sample.

In both the 1966 and 1968 questionnaire administrations, the students were asked to respond to stimulus questions eliciting their occupational and educational aspirations; specifically, the occupation and level of education they would most like to attain during their lifetime if they were "completely free to choose." Subsequent questions elicited their expectations or the occupation and level of education they actually anticipated in the long run.

For analysis in this paper, the responses to the questions relating to

occupation have been grouped into four rank-ordered categories or levels as follows:

Very high -- professional and technical workers

High -- glamour occupations (e.g., professional entertainers and athletes), official and managerial occupations, farm owners, managers

Moderate -- clerical and sales workers, skilled laborer

Low -- operatives and unskilled labor

Occupational anticipatory deflection was derived from more specific categories within these levels. For this purpose, the categories were ranked in the order listed above, with the exception that the categories of farm owners or managers and official and managerial occupations were accorded equal rank. If a respondent's expectation ranked lower than his aspiration, he was classified as having experienced negative anticipatory deflection. If his expectation ranked higher than his aspiration, he was classified as having experienced positive anticipatory deflection. If his aspirations and expectations were of equal rank, the respondent <u>did not</u> experience any anticipatory deflection from his occupational goals.

The questions eliciting educational aspirations and expectations were structured, whereby the respondents chose one among several alternative responses ranging from "quit high school" to "college plus additional study." Levels of educational aspirations and expectations were derived by grouping these responses as follows:

High -- college plus additional study and college graduate

Moderate -- junior college graduate and high school plus vocational training

Low -- high school graduate and quit high school

In determining educational anticipatory deflection, the more specific educational aspirations and expectation responses were ranked in the order listed and were compared in the same manner as occupational aspirations and expectations.

ANALYSIS OF FINDINGS

Heretofore, much of the knowledge regarding change over time in occupational and educational status projections has been based on comparisons of the aggregate distributions of these orientations. Similar distributions at different points in time have suggested status projections of individual youth have been relatively stable. However, aggregate comparison may obscure much individual change. That is, individual shifts in status projections may be counterbalanced by other individual shifts of opposite direction, thereby producing aggregate similarity.

This paper deals primarily with individual change in status projections. Tables illustrating aggregate comparisons are presented in Appendix B and will be described only briefly here. These comparisons indicate that, generally, there was little aggregate change in occupational or educational status projections over time. However, the Negro boys showed greater change in this regard than the whites, especially in occupational aspirations and educational expectations. The occupational aspirations of these youth were significantly higher in 1968 than in 1966. This was due to a shift from the low to the moderate level. In contrast, the educational expectations of the Negro boys were substantially lower in 1968 due primarily to a marked movement away from the high level. The result was slightly lower educational expectations of the Negro than white youth in 1968 compared to higher educational expectations on the part of the Negro boys in 1966. In regard to occupational and educational anticipatory deflection, there were no significant aggregate changes over the two years for either the Negro or white youth.

Despite the lack of aggregate change, the status projections at the individual level appear to have been rather unstable. The individual shifts merely offset each other. Consistently, Negro youth changed their aspirations and

expectations more often than white youth. These trends occurred in regard to both occupational and educational orientations.

Occupational Status Projections

Over half of the Negro boys and only slightly less than half of the whites changed the level of their occupational aspirations from 1966 to 1968, Table 1. Occupational expectations were even less stable. Although the shifts upward and downward tended to balance each other, the general trend was to raise rather than lower these status projections, especially for the Negro youth.

Generally, change at the various levels of occupational aspirations were similar to changes at the corresponding levels of occupational expectations. Very high occupational aspirations and expectations, which the white boys chose more often than any other level aspiration or expectation in 1966, were highly stable over time for these youth, Tables 2 and 3. In contrast, about half of the Negro boys who held very high occupational aspirations and expectations in 1966 lowered them in 1968, Tables 4 and 5. In contrast to very high status projections, high occupational aspirations and expectations were strikingly unstable. Only about one-third of the Negro and white boys who held such aspirations and expectations in 1966 also held them in 1968. Moderate occupational aspirations and expectations were only slightly more stable. They were retained by only half of the white youth who reported moderate occupational aspirations and expectations in 1966. Moderate occupational expectations were congruent, by level, for an even smaller proportion of the Negro boys; however, almost as many as two-thirds of the Negroes who reported moderate occupational aspirations in 1966 aspired to occupational attainment at the same level in 1968. Low occupational aspirations and expectations were stable for about half of the white boys who held them in 1966. On the other hand, the

Table 1. Changes in Level of Occupational Status Projections of Rural Negro and White Boys From 1966 to 1968.

Nature of 1968 Change	Occupational Aspiration	Occupational Expectation
	Percent	
Negro:		
Upward	38	40
Downward	21	28
Total Change	59	68
White:		
Upward	26	25
Downward	18	25
Total Change	44	50

Table 2. 1968 Occupational Aspiration Level of Rural White Boys by 1966 Occupational Aspiration Level.

1968 Aspiration Level	1966 Aspiration Level			
	Very High (N=53)	High (N=31)	Moderate (N=37)	Low (N=5)
	Percent			
Very High	(79)	36	35	20
High	15	(35)	14	0
Moderate	6	26	(43)	40
Low	0	3	8	(40)
Total	100	100	100	100

Table 3. 1968 Occupational Expectation Level of Rural White Boys by 1966 Occupational Expectation Level.

1968 Expectation Level	1966 Expectation Level			
	Very High (N=40)	High (N=37)	Moderate (N=31)	Low (N=16)
	Percent			
Very High	(70)	35	19	19
High	10	(27)	13	6
Moderate	18	27	(52)	25
Low	2	11	16	(50)
Total	100	100	100	100

Table 4. 1968 Occupational Aspiration Level of Rural Negro Boys by 1966 Occupational Aspiration Level.

1968 Aspiration Level	1966 Aspiration Level			
	Very High (N=28)	High (N=16)	Moderate (N=17)	Low (N=21)
	Percent			
Very High	(53)	44	12	24
High	7	(31)	23	14
Moderate	29	19	(65)	48
Low	11	6	0	(14)
Total	100	100	100	100

Table 5. 1968 Occupational Expectation Level of Rural Negro Boys by 1966 Occupational Expectation Level.

1968 Expectation Level	1966 Expectation Level			
	Very High (N=24)	High (N=15)	Moderate (N=18)	Low (N=24)
	Percent			
Very High	(50)	27	16	21
High	4	(33)	17	13
Moderate	29	33	(39)	58
Low	17	7	28	(8)
Total	100	100	100	100

low occupational aspirations and expectations of the Negroes were very unstable, as the aggretage comparisons suggest.

The changes at the various levels were generally not of great degree. Most deflection was merely to adjacent levels. However, there was a tendency for the Negro boys to shift very high occupational aspirations and expectations to the moderate rather than the high level, and a tendency for white boys to shift moderate occupational aspirations and expectations to the very high level. The Negro boys also tended to shift moderate occupational status projections upward rather than downward, although the shifts were not as far as those of the whites. Generally, deflection from high occupational aspirations and expectations were to the next highest level. However, the Negro youth more often lowered than raised these projections.

For the most part, changes from a specific occupational level was offset by changes to that level. In exception were the low occupational aspirations and expectations of the Negro boys. Whereas almost all the Negroes holding these aspirations and expectations in 1966 later raised them, there was little movement of aspirations and expectations in 1968 to the low from the other occupational levels. Discrepancy between occupational aspirations and expectations, occupational anticipatory deflection, appeared rather variable over time when analyzed on an individual, in contrast to aggregate, basis. The nature of occupational anticipatory deflection or the lack of such deflection in 1966 was congruent with that in 1968 for only 51 percent of the Negro boys and 61 percent of the whites. Nevertheless, the majority of the white and Negro boys did not anticipate any deflection from their occupational goals in either 1966 or 1968, Table 3, Appendix B. Approximately two-thirds of the Negro and white boys who did <u>not</u> experience occupational anticipatory deflection in 1966 did <u>not</u> experience this deflection in 1968 either, Tables 6 and 7. Moreover, the

Table 6. 1968 Occupational Anticipatory Deflection of Rural White Males by 1966 Occupational Anticipatory Deflection.

1968 Anticipatory Deflection	1966 Anticipatory Deflection		
	Positive (N=9)	None (N=91)	Negative (N=24)
	Percent		
Positive	(33)	9	13
None	45	(66)	33
Negative	22	25	(54)
Total	100	100	100

Table 7. 1968 Occupational Anticipatory Deflection of Rural Negro Males by 1966 Occupational Anticipatory Deflection.

1968 Anticipatory Deflection	1966 Anticipatory Deflection		
	Positive (N=11)	None (N=53)	Negative (N=17)
	Percent		
Positive	(18)	17	6
None	46	(62)	59
Negative	36	21	(35)
Total	100	100	100

boys who did experience anticipatory deflection, either positive or negative, in 1966 tended not to anticipate deflection from their goals in 1968. Positive anticipatory deflection was especially unstable. In addition, most of the change among those anticipating no deflection from their occupational goals in 1966 was to negative rather than positive anticipatory deflection.

Educational Status Projections

The white boys experienced little individual, as well as aggregate, change in level of educational aspirations and expectations, Table 8. In contrast, only about half of the Negro youth held educational aspirations or expectations in 1968 that were congruent, by level, with those they reported in 1966. Change in these status projections of the white boys did not tend strongly in one direction. However, the Negro boys raised their educational aspirations and expectations substantially more often than they lowered them.

For both white and Negro youth, the higher the level of educational aspirations, the more stable these aspirations appeared, Tables 9 and 10. High educational aspirations, which the majority of the Negro and white youth chose in 1966, were very stable for the white boys; less than one-tenth of the whites reporting these aspirations in 1966 lowered them in 1968. About one-third of the Negroes did so. Only about half of either the white or Negro youth who reported moderate educational aspirations in 1966 retained educational aspirations of the same level in 1968. Low educational aspirations were slightly less stable than this for the white boys and highly unstable for the Negroes.

Similar congruency or change can be observed at the high and moderate educational expectation levels for the whites, Tables 11 and 12. However, high educational expectations of the Negro youth were less stable than high educational aspirations. Only half of the Negroes reporting educational expectations of this level in 1966 again reported high educational expectations in 1968. In contrast, low educational expectations of the Negro and

Table 8. Changes in Level of Educational Status Projections of Rural Negro and White Boys From 1966 to 1968.

Nature of 1968 Change	Educational Aspiration	Educational Expectation
	----------Percent----------	
Negro:		
Upward	12	10
Downward	30	40
Total Change	42	50
White:		
Upward	15	13
Downward	9	12
Total Change	24	25

Table 9. 1968 Educational Aspiration Level of Rural White Boys by 1968 Educational Aspiration Level.

1968 Aspiration Level	1966 Aspiration Level		
	High (N=79)	Moderate (N=32)	Low (N=15)
	----------Percent----------		
High	(91)	28	12
Moderate	6	(56)	47
Low	3	16	(41)
Total	100	100	100

Table 10. 1968 Educational Aspiration Level of Rural Negro Boys by 1966 Educational Aspiration Level.

1968 Aspiration Level	1966 Aspiration Level		
	High (N=54)	Moderate (N=25)	Low (N=5)
	Percent		
High	(65)	24	0
Moderate	33	(52)	80
Low	2	24	(20)
Total	100	100	100

Table 11. 1968 Educational Expectation Level of White Boys by 1966 Educational Expectation Level.

1968 Expectation Level	1966 Expectation Level		
	High (N=66)	Moderate (N=38)	Low (N=23)
	Percent		
High	(91)	26	13
Moderate	6	(50)	17
Low	3	24	(70)
Total	100	100	100

Table 12. 1968 Educational Expectation Level of Negro Boys by 1966 Educational Expectation Level.

1968 Expectation Level	1966 Expectation Level		
	High (N=53)	Moderate (N=28)	Low (N=5)
	Percent		
High	(51)	25	0
Moderate	43	(46)	40
Low	6	29	(60)
Total	100	100	100

white boys were considerably more stable than low educational aspirations. Almost two-thirds of the Negroes and white boys holding these expectations in 1966 retained expectations of the same level in 1968.

The change in educational aspirations and expectations, like that in occupational aspirations and expectations, was not of great degree. Most movement between 1966 and 1968 was to an adjacent level. As a rule, shifts from a specific level were offset by other shifts to this level. An exception was a large amount of downward deflection from high-level educational aspirations and expectations by the Negro boys which was not balanced by upward deflection to this level.

Only slightly over half of the Negro (55 percent) or white boys (59 percent) experienced educational anticipatory deflection or the lack of it in 1968 which was congruent with their experience in this regard in 1966. However, in both years, the bulk of the white and Negro boys did not anticipate any deflection from their goals. As in regard to occupational anticipatory deflection, the majority of the boys who did not experience any educational anticipatory deflection in 1966 did not experience this deflection again in 1968, Tables 13 and 14. In addition, half of the whites and slightly more of the Negroes who did anticipate deflection from their educational goals in 1966 did not anticipate deflection in 1968. Like positive occupational anticipatory deflection, positive educational anticipatory deflection was highly unstable, and between 1966 and 1968 there was considerably less movement to positive deflection than to negative deflection.

Table 13. 1968 Educational Anticipatory Deflection of Rural White Males by 1966 Educational Anticipatory Deflection.

1968 Anticipatory Deflection	1966 Anticipatory Deflection		
	Positive (N=5)	None (N=92)	Negative (N=30)
	Percent		
Positive	(0)	4	3
None	80	(65)	47
Negative	20	31	(50)
Total	100	100	100

Table 14. 1968 Educational Anticipatory Deflection of Rural Negro Males by 1966 Educational Anticipatory Deflection.

1968 Anticipatory Deflection	1966 Anticipatory Deflection		
	Positive (N=9)	None (N=53)	Negative (N=22)
	Percent		
Positive	(22)	2	9
None	45	(66)	50
Negative	33	32	(41)
Total	100	100	100

SUMMARY AND CONCLUSIONS

In contrast to evidence of aggregate similarities, individual analysis reveals a general instability of occupational and educational orientations between 1966 and 1968, especially for the Negro boys. However, much of the change was not in the direction hypothesized. As shown in Table 15, a relatively small proportion of the Negro and white boys deflected their aspirations or expectations downward in 1968. In fact, our analysis has shown that there was generally a greater incidence of upward than downward deflection of orientations over time. The proportions of Negro and white boys who deflected their aspirations and expectations downward combined with the very small proportions who held low-level aspirations and expectations both in 1966 and 1968, Table 16, indicate rejection of Hypothesis 1.

Hypothesis 2, that the Negro boys will show more downward deflection of aspirations and expectations over time than the white boys, must be rejected in reference to occupational status projections, Table 15. However, Negro boys reported substantially lower educational aspirations and expectations in 1968 compared to these status projections in 1966 than the whites. Therefore, Hypothesis 2 as it relates to educational status projections is accepted.

The remaining hypothesis, that incidence of anticipatory deflection will decrease over the 2 year period, must be rejected for both Negro and white youth in light of the aggregate comparisons, Table 17. However, individual analysis reveals that generally over half of the boys who anticipated deflection from their occupational and educational goals in 1966 did not anticipate any deflection in 1968, Table 18. Nevertheless, this decrease in anticipatory deflection was counterbalanced by the incidence of anticipatory deflection, although proportionately small compared to the incidence of no deflection, among the youth who did not experience such deflection in 1966.

Table 15. Percent of Boys Deflecting their Aspirations and Expectations Downward Between 1966 and 1968, By Race.

Status Projection	Negro	White
Occupational Aspiration[a]	21	18
Occupational Expectation[b]	28	25
Educational Aspiration[c]	30	9
Educational Expectation[d]	40	12

[a] $x^2 = .19$	df = 2	$.90 < P < .95$
[b] $x^2 = .29$	df = 2	$.80 < P < .90$
[c] $x^2 = 14.63$	df = 2	$P < .001$
[d] $x^2 = 22.26$	df = 2	$P < .001$

Table 16. Percent of Negro and White Boys Whose Aspirations and Expectations were Either Stable at a Low Level or Deflected Downward Over Time.

Status Projection	Negro	White
Occupational Aspiration	25	20
Occupational Expectation	31	29
Educational Aspiration	31	14
Educational Expectation	43	25

Table 17. Incidence of Anticipatory Deflection of Negro and White Boys in 1966 and 1968.

Type of Anticipatory Deflection	Negro[a]		White[b]	
	1966	1968	1966	1968
	percent			
Occupational	35	40	27	42
Educational	36	40	28	38

[a] Occupational: $x^2_2 = .52$ df = 2 $.70 < P < .80$
Educational: $x^2 = .36$ df = 2 $.80 < P < .90$

[b] Occupational: $x^2_2 = 6.32$ df = 2 $.02 < P < .05$
Educational: $x^2 = 2.83$ df = 2 $.20 < P < .30$

Table 18. Percent of Negro and White Boys Experiencing Occupational Anticipatory Deflection in 1966 who did not Experience Deflection in 1968.

Type of Anticipatory Deflection	Negro	White
Occupational	54	36
Educational	48	51

Table 19. Percent of Negro and White Boys Showing Stability of Status Projections, by Level of Status Projection

Status Projection	Negro				White			
	Very High	High	Moderate	Low	Very High	High	Moderate	Low
Occupational Aspiration	53	31	65	14	79	35	43	40
Occupational Expectation	50	33	39	8	70	27	52	50
Educational Aspiration	--	65	52	20	--	91	56	41
Educational Expectation	--	51	46	60	--	91	50	70

Summarized in Table 19 is the stability evidenced at each level of status projections. Almost without exception, the occupational and educational aspirations and expectations of the Negro boys were more stable than those of the whites at every level of the scale. Generally, greatest stability was found at the highest level where aspirations and expectations were at least moderately stable. High-level occupational aspirations and expectations tended to be unstable as were low-level occupational and educational aspirations. Low expectations, on the other hand, were of moderate stability, with the exception of the marked instability of the low occupational expectations of the Negro youth.

Degree of change in status projections was seldom great. Generally, deflection was to an adjacent level. Evidence of aggregate similarities attests to a general counterbalancing of deflection from a level by deflection to the level.

Generally, the occupational aspirations and expectations of both the white and Negro youth appeared more dynamic than their educational status projections.[4] Moreover, the bulk of the change in the occupational aspirations and expectations of the Negroes was of opposite direction to their change in educational aspirations and expectations. The occupational aspirations and expectations of these youth tended to shift upward, whereas their educational aspirations and expectations tended to shift downward.

---

[4]Of course, the larger the number of categories into which the orientations are grouped, the less congruent the orientations will appear to be. The difference in the number of categories of occupational and educational orientations should be considered in comparisons of the congruency or incongruency of these orientations.

DISCUSSION

The high incidence of individual instability of occupational and educational status projections observed in this study parallels findings of three similar studies of Georgia and Texas, Florida, and Alabama high school youth, respectively (Knapp, 1969; Rice, 1962; and Thaxton, 1969). Our finding that there was generally a greater incidence of upward than downward change of orientations over time also was in agreement with the results of the studies cited above.

The general positive association noted between level of status projections and stability of projections over time agrees with Thaxton's (1969) findings in Alabama. Again, these results were in direct contradiction with the hypothesized downward deflection of higher level projections and stability of lower level projections.

Past research (Pelham, 1968) has indicated that when levels of occupational and educational status projections were compared, Negroes quite frequently expressed educational projections at an extremely high level relative to their occupational projections. Therefore, it is suggested that perhaps the observed downward deflection of educational status projections of the Negro respondents in this study represents an attempt to align educational and occupational status projection levels. Additional research focusing on status consistency of status projections over time is called for to better understand the nature of the dynamic interaction of the projections of the various status areas, i.e. occupational, educational, income, etc.

Probably the most interesting finding in regard to the dynamics of anticipatory goal deflection was the differential stability of the various types of deflection. Further research designed to investigate the dynamics of antici-

patory goal deflection as well as behavioral consequences of negative and positive anticipated deflection from goals could provide us with some valuable insights into the dilemmas facing disadvantaged rural youth today. In addition, such research might allow us to more systematically integrate an explicit psychological theory dealing with the dynamics of cognitive processes.

Lo Cascio (1967:32) has suggested that vocational development of the less advantaged youth is best characterized by its discontinuity, particularly until after high school at which time such youth have an opportunity to experience what they perceive as vocationally relevant learning. The individual instabilities observed in our analysis lend considerable support to that position.

The fact that our findings generally failed to support our theoretically derived hypotheses leads us to conclude that either existing theories of vocational development lack sufficient articulation or that they are based on unsound assumptions. At this time, it would be expedient to empirically test the validity and generality of some of the underlying assumptions on which most theory and research in this area is based. Do status projections become more realistic over time? Do both aspirations and expectations adjust to perceived goal blockage in a predictable manner? Are aspirations and expectations and values strongly interrelated?

REFERENCES

Beilin, Harry
1955 "The application of general developmental principles to the vocational area." Journal of Counseling Psychology, 2 (Spring); 53-57.

Blau, Peter M. et. al.
1956 "Occupational choice: a conceptual framework." Industrial and Labor Relations Review 9 (July): 531-543.

Boskoff, Alvin
1969 Theory in American Sociology: Major Sources and Applications. New York: Thomas Y. Crowell Co.

Burchinal, L. G., A. O. Haller, and M. T. Taves
1962 Career Choices of Rural Youth in a Changing Society. St. Paul: Minnesota Agricultural Experiment Station, Bulletin 458.

Cosby, Arthur
1969 "The Disadvantaged Student, Goal Blockage, and the Occupational Aspirations of Southern Youth." Paper presented at the Association of Southern Agricultural Workers Meetings, Mobile, Alabama.

Dunsavage, Evelyn and Michael Kleibrink
1970 "The Relationship of Aspirations and Expectations to Values." Paper presented at the Annual Meeting of the Texas Academy of Science, San Angelo, Texas.

Ginzberg, Eli and others
1951 Occupational Choice. New York: Columbia University Press.

Ginzberg, Eli
1952 "Toward a theory of occupational choice." Personnel and Guidance Journal 30 (April): 491-494.

Knapp, Melvin
1969 "Mobility Aspirations and Expectations of Southern Youth." Paper presented at the annual meeting of the Association of Southern Agricultural Workers, Mobile, Alabama.

Kuvlesky, William P.
1966 "The Social-Psychological Dimensions of Occupational Mobility." Paper presented at the National Vocational Technical Education Seminar on Occupational Mobility and Migration, Raleigh, North Carolina.

1969a "A Synthetic Overview of Research on Rural Youth's Projections for Occupational and Educational Attainment." Paper presented at the Annual Meetings of the Rural Sociological Society, San Francisco.

1969b "Generalizations about the relationship of occupational aspirations to subsequent attainment." Rural Sociology 34 (March): 95-97.

Kuvlesky, William P. and Robert C. Bealer
1966 "A clarification of the concept 'occupational choice.'" Rural Sociology 31 (September): 265-276.

1967 "The relevance of adolescents' occupational aspirations for subsequent job attainment." Rural Sociology 32 (September): 290-301.

Kuvlesky, William P. and Nelson L. Jacob
1968 Educational Status Orientations of Rural Youth: Structured Annotations of the Research Literature. Texas A&M University, Department of Agricultural Economics and Sociology, DTR 68-3.

Kuvlesky, William P. and Michael F. Lever
1967 Occupational Status Orientations of Negro Youth: Annotated Abstracts of the Research Literature. Texas A&M University, Department of Agricultural Economics and Sociology, DTR 67-2.

Kuvlesky, William P. and George W. Ohlendorf
1967a A Bibliography of Literature on Status Projections of Youth: I. Occupational Aspirations and Expectations. Texas A&M University, Department of Agricultural Economics and Sociology, DIR 67-10.

1967b A Bibliography of Literature on Status Projections of Youth: III. Residence, Income and Family Orientations. Texas A&M University, Department of Agricultural Economics and Sociology, DIR 67-12.

Kuvlesky, William P. and John Pelham
1966 Occupational Status Orientations of Rural Youth: Structured Annotations and Evaluations of Research Literature. Texas A&M University, Department of Agricultural Economics and Sociology, DTR 66-3.

Lever, Michael F. and William P. Kuvlesky
1969 "Socio-Economic Status and Occupational Status Projections of Rural Southern Youth." Paper presented at the annual meeting of the Rural Sociological Society, San Francisco.

Lo Cascio, Ralph
1967 "Continuity and discontinuity in vocational development theory." Personnel and Guidance Journal 46 (September): 32-36.

Ohlendorf, George W., Sherry Wages, and William P. Kuvlesky
1967 A Bibliography of Literature on Status Projections of Youth: II. Educational Aspirations and Expectations. Texas A&M University Department of Agricultural Economics and Sociology, DIR 67-11.

Pelham, John T.
1968 An Analysis of Status Consistency of the Projected Frames of Reference: A Racial Comparison of Males in Selected Low-Income Areas of the Rural South. Unpublished Master's Thesis, College Station: Texas A&M University.

Rice, John R.
1962 Changes in the Levels of Educational and Occupational Aspirations Between the Tenth and Twelfth Grades of Capable High School Students in North Florida. Unpublished Doctoral Dissertation, Tallahassee: Florida State University.

Short, James F., Jr.
1964 "Gang Delinquency and Anomie." Pp. 98-127 in Marshall B. Clinard (ed.), Anomie and Deviant Behavior: A Discussion and Critique. New York: The Free Press.

Slocum, W. L.
1966 Occupational Careers. Chicago: Aldine Publishing Co. (Chapter 11).

Taylor, L.
1968 Occupational Sociology. New York: Oxford University Press (Chapter 8).

Thaxton, Stephen Scott
1969 Occupational Status Orientations of Northeast Alabama High School Boys: A Longitudinal Perspective. Unpublished Master's Thesis, Auburn, Alabama: Augurn University.

Thomas, Katheryn Ann
1970 "Educational Orientations of Southern Rural Youth: An Analysis of Socio-Economic Status and Racial Differences." Unpublished Master's Thesis, Lexington: University of Kentucky.

Tiedeman, David V.
1961 "Decision and vocational development: a paradigm and its implications." Personnel and Guidance Journal 40 (September): 15-20.

U. S. Bureau of the Census
1968 Statistical Abstract of the United States: 1968 (89th edition). Washington, D. C.

APPENDIX A

COMPARISONS OF THE STATUS PROJECTIONS OF THE BOYS RECONTACTED AND THE BOYS NOT RECONTACTED IN 1968

Table 1. 1966 Occupational Aspirations of the Boys Recontacted and Those Not Recontacted in 1968.

Occupational Aspiration	Negro		White	
	Recontacted (N=87)	Not Recontacted (N=10)	Recontacted (N=128)	Not Recontacted (N=15)
	percent			
Very High	32	40	42	33
High	22	10	25	40
Moderate	21	30	29	0
Low	25	20	4	27
Total	100	100	100	100
No information	0	1	0	2

Table 2. 1966 Occupational Expectations of the Boys Recontacted and Those Not Recontacted in 1968.

Occupational Expectation	Negro		White	
	Recontacted (N=86)	Not Recontacted (N=10)	Recontacted (N=126)	Not Recontacted (N=15)
	percent			
Very High	29	60	32	33
High	20	10	30	33
Moderate	31	10	25	20
Low	30	20	13	14
Total	100	100	100	100
No information	1	1	2	2

Table 3. 1966 Educational Aspirations of the Boys Recontacted and Those Not Recontacted in 1968

Educational Aspiration	Negro		White	
	Recontacted (N=86)	Not Recontacted (N=11)	Recontacted (N=128)	Not Recontacted (N=16)
	percent			
High	63	73	62	31
Moderate	31	18	25	44
Low	6	9	13	25
Total	100	100	100	100
No information	1	0	0	1

Table 4. 1966 Educational Expectations of the Boys Recontacted and Those Not Recontacted in 1968.

Educational Expectation	Negro		White	
	Recontacted (N=87)	Not Recontacted (N=10)	Recontacted (N=127	Not Recontacted (N=17)
	percent			
High	61	70	62	24
Moderate	33	10	25	41
Low	6	20	13	35
Total	100	100	100	100
No information	0	1	1	0

Table 5. 1966 Occupational Anticipatory Deflection of the Boys Recontacted and Those Not Recontacted in 1968.

Nature of Deflection	Negro		White	
	Recontacted (N=86)	Not Recontacted (N=9)	Recontacted (N=126)	Not Recontacted (N=15)
	percent			
None	65	89	73	60
Positive	14	11	7	20
Negative	21	0	20	20
Total	100	100	100	100
No information	1	2	2	2

Table 6. 1966 Educational Anticipatory Deflection of the Boys Recontacted and Those Not Recontacted in 1968.

Nature of Deflection	Negro		White	
	Recontacted (N=86)	Not Recontacted (N=10)	Recontacted (N=127)	Not Recontacted (N=16)
	percent			
None	64	70	72	81
Positive	10	20	4	0
Negative	26	10	24	19
Total	100	100	100	100
No information	1	1	1	1

APPENDIX B

AGGREGATE COMPARISONS OF 1966 AND 1968 STATUS PROJECTIONS

Table 1. Level of Occupational Aspirations of Rural Negro and White Boys in 1966 and 1968.

Level of Aspiration	Negro[a] 1966 (N=87)	Negro[a] 1968 (N=82)	White[b] 1966 (N=128)	White[b] 1968 (N=126)
	Percent			
Very High	32	35	42	53
High	22	17	25	19
Moderate	21	39	29	23
Low	25	9	4	5
Total	100	100	100	100
No Information	0	5	0	2

$^{a}x^2 = 12.31$ df = 3 $.001 < P < .01$

$^{b}x^2 = 3.58$ df = 3 $.40 < P < .50$

Table 2. Level of Occupational Expectations of Rural Negro and White Boys in 1966 and 1968.

Level of Expectation	Negro[a] 1966 (N=86)	Negro[a] 1968 (N=82)	White[b] 1966 (N=126)	White[b] 1968 (N=126)
	Percent			
Very High	29	29	32	41
High	20	15	30	15
Moderate	31	41	25	29
Low	30	15	13	15
Total	100	100	100	100
No Information	1	5	2	2

$^{a}x^2 = 10.88$ df = 3 $.01 < P < .02$

$^{b}x^2 = 8.20$ df = 3 $.02 < P < .05$

Table 3. Occupational Anticipatory Deflection of Rural Negro and White Boys in 1966 and 1968.

Anticipatory Deflection	Negro[a] 1966 (N=86)	Negro[a] 1968 (N=82)	White[b] 1966 (N=126)	White[b] 1968 (N=126)
	Percent			
None	65	60	73	58
Positive	14	15	7	11
Negative	21	25	20	31
Total	100	100	100	100
No Information	1	5	2	2

$^{a}x^2 = .60$ df = 2 $.95 < P < .98$

$^{b}x^2 = 6.32$ df = 2 $.02 < P < .05$

Table 4. Level of Educational Aspirations of Rural Negro and White Boys in 1966 and 1968.

Level of Aspiration	Negro[a] 1966 (N=86)	Negro[a] 1968 (N=84)	White[b] 1966 (N=128)	White[b] 1968 (N=128)
	Percent			
High	63	49	62	65
Moderate	31	42	25	24
Low	6	9	13	11
Total	100	100	100	100
No Information	1	3	0	0

$^{a}x^2 = 3.48$ df = 2 $.10 < P < .20$

$^{b}x^2 = .65$ df = 2 $.70 < P < .80$

Table 5. Level of Educational Expectations of Negro and White Boys in 1966 and 1968.

Level of Expectation	Negro[a] 1966 (N=87)	Negro[a] 1968 (N=86)	White[b] 1966 (N=127)	White[b] 1968 (N=128)
	Percent			
High	61	40	52	57
Moderate	33	44	30	22
Low	6	16	18	21
Total	100	100	100	100
No Information	0	1	1	

$^{a}x^{2} = 9.61$ df = 2 $.001 < P < .01$

$^{b}x^{2} = 2.17$ df = 2 $.30 < P < .50$

Table 6. Educational Anticipatory Deflection of Rural Negro and White Boys in 1966 and 1968.

Anticipatory Deflection	Negro[a] 1966 (N=86)	Negro[a] 1968 (N=84)	White[b] 1966 (N=127)	White[b] 1968 (N=128)
	Percent			
None	64	60	72	62
Positive	10	6	4	4
Negative	26	34	24	34
Total	100	100	100	100
No Information	1	3	1	0

$^{a}x^{2} = 2.32$ df = 2 $.30 < P < .50$

$^{b}x^{2} = 3.63$ df = 2 $.10 < P < .20$

APPENDIX C

CHANGE AMONG MORE SPECIFIC OCCUPATIONAL ASPIRATIONS AND EXPECTATIONS

Of the more specific categories of occupational status projections, skilled labor was the most stable over time for the Negroes and professional status projections the most stable for the white boys. Generally, the remainder of the occupational aspirations and expectations were highly unstable for the boys of both races. Much of the deflection was to the categories of skilled labor and low professional occupations for the Negroes and whites, respectively.

In regard to the more specific categories of educational status projections, the white boys' aspirations and expectations at both categories included in the high level, college graduate and college plus additional study, were generally stable. Both of these categories of aspirations and expectations were unstable for the Negro youth, especially the former. With the exception of projections to graduate from high school, the remainder of the more specific educational aspirations and expectations were unstable for both Negroes and whites.

The following tables illustrate in detail the changes among the more specific occupational categories. Numbers in parentheses indicate the percentage of responses at that level that remained stable between 1966 and 1968.

Table 1. 1968 Occupational Aspiration of Rural White Boys by 1966 Occupational Aspiration.

1968 Aspiration	1966 Aspiration							
	High Professional (N=14)	Low Professional (N=40)	Glamour (N=11)	Farm Owner or Manager (N=14)	Managerial (N=7)	Sales & Clerical (N=6)	Skilled Labor (N=31)	Operative (N=5)
	Percent							
High Professional	(64)	13	10	0	15	0	3	0
Low Professional	29	(62)	20	29	43	33	33	20
Glamour	0	13	(20)	14	0	17	3	0
Farm Owner or Manager	0	5	9	(29)	14	0	0	0
Managerial	0	2	0	0	(14)	33	3	0
Sales/Clerical	7	0	0	7	14	(0)	3	20
Skilled Trade	0	5	28	21	0	17	(45)	20
Operative	0	0	9	0	0	0	3	(20)
Unskilled Laborer	0	0	0	0	0	0	7	20
Total	100	100	100	100	100	100	100	100

Table 2. 1968 Occupational Aspiration of Rural Negro Boys by 1966 Occupational Aspiration.

1968 Aspiration	1966 Aspiration								
	High Professional (N=4)	Low Professional (N=24)	Glamour (N=15)	Farm Owner or Manager (N=2)	Managerial (N=2)	Sales & Clerical (N=8)	Skilled Labor (N=10)	Operative (N=15)	Unskilled Laborer (N=7)
	Percent								
High Professional	(25)	13	0	0	0	0	0	7	0
Low Professional	0	(46)	50	0	0	12	11	29	0
Glamour	0	4	(36)	0	0	0	11	7	0
Farm Owner or Manager	0	0	0	(0)	0	0	0	0	0
Managerial	0	4	0	0	(0)	38	0	7	14
Sales/Clerical	25	4	0	0	0	(12)	11	7	0
Skilled Trade	50	17	14	0	50	38	(67)	36	58
Operative	0	4	0	0	0	0	0	(0)	14
Unskilled Laborer	0	8	0	0	50	0	0	7	(14)
Total	100	100	100	100	100	100	100	100	100

Table 3. 1968 Occupational Expectation of Rural White Boys by 1966 Occupational Expectation.

1968 Expectation	1966 Expectation									
	High Professional (N=9)	Low Professional (N=32)	Glamour (N=8)	Farm Owner or Manager (N=21)	Managerial (N=9)	Sales & Clerical (N=3)	Skilled Labor (N=28)	Operative (N=13)	Unskilled Laborer (N=3)	No Info. (N=2)
	Percent									
High Professional	(56)	3	12	9	13	0	0	0	33	0
Low Professional	22	(65)	38	24	12	0	21	15	0	50
Glamour	0	0	(0)	0	0	0	0	8	0	0
Farm Owner or Manager	0	3	0	(33)	0	0	4	0	0	0
Managerial	0	10	0	0	(38)	67	4	0	0	0
Sales/Clerical	11	13	12	5	25	(0)	7	8	0	0
Skilled Trade	0	6	25	19	0	33	(46)	15	33	0
Operative	0	0	13	5	12	0	7	(39)	34	0
Unskilled Laborer	11	0	0	5	0	0	11	15	(0)	50
Total	100	100	100	100	100	100	100	100	100	100

Table 4. 1968 Occupational Expectation of Rural Negro Boys by 1966 Occupational Expectation.

1968 Expectation	1966 Expectation: High Professional (N=2)	Low Professional (N=23)	Glamour (N=14)	Farm Owner or Manager (N=1)	Managerial (N=2)	Sales & Clerical (N=6)	Skilled Labor (N=12)	Operative (N=21)	Unskilled Laborer (N=5)
	Percent								
High Professional	(50)	5	0	0	0	0	0	0	0
Low Professional	0	(45)	31	0	0	0	25	26	0
Glamour	0	4	(23)	0	0	16	8	11	0
Farm Owner or Manager	0	0	0	(100)	0	0	0	0	0
Managerial	0	0	8	0	(0)	17	0	5	0
Sales/Clerical	0	14	0	0	0	(0)	0	5	20
Skilled Trade	50	14	31	0	100	17	(50)	53	40
Operative	0	14	0	0	0	0	17	(0)	20
Unskilled Laborer	0	4	7	0	0	50	0	0	(20)
Total	100	100	100	100	100	100	100	100	100

Table 5. 1968 Educational Aspiration of Rural White Boys by 1966 Educational Aspiration.

1968 Aspiration	1966 Aspiration: College + Addl. Study (N=24)	College Graduate (N=55)	Jr. College Graduate (N=10)	High School + Voc. Training (N=22)	High School Graduate (N=10)	Quit High School (N=7)
	Percent					
College + Additional Study	(67)	36	0	13	0	0
College Graduate	29	(53)	30	14	0	29
Junior College Graduate	0	2	(20)	14	0	0
High School + Vocational Training	4	5	40	(41)	50	43
High School Graduate	0	4	10	18	(30)	28
Quit High School	0	0	0	0	20	(0)
Total	100	100	100	100	100	100

Table 6. 1968 Educational Aspiration of Negro Boys by 1966 Educational Aspiration.

1968 Aspiration	1966 Aspiration: College + Additional Study (N=36)	College Graduate (N=18)	Jr. College Graduate (N=6)	High School + Voc. Training (N=19)	High School Graduate (N=1)	Quit High School (N=4)
	Percent					
College + Additional Study	(30)	33	0	16	0	0
College Graduate	28	(45)	0	16	0	0
Jr. College Graduate	3	11	(33)	26	0	0
High School + Vocational Training	36	11	33	(21)	0	100
High School Graduate	3	0	34	21	(100)	0
Total	100	100	100	100	100	100

Table 7. 1968 Educational Expectation of Rural White Boys by 1966 Educational Expectation.

1968 Expectation	1966 Expectation					
	College + Addl. Study (N=10)	College Graduate (N=56)	Jr. College Graduate (N=9)	High School + Voc. Training (N=29)	High School Graduate (N=18)	Quit High School (N=5)
	Percent					
College + Additional Study	(50)	11	0	0	0	0
College Graduate	50	(79)	33	24	11	20
Junior College Graduate	0	2	(11)	17	6	0
High School + Vocational Training	0	5	33	(34)	11	20
High School Graduate	0	4	22	21	(61)	40
Quit High School	0	0	0	3	11	(20)
Total	100	100	100	100	100	100

Table 8. 1968 Educational Expectation of Rural Negro Boys by 1966 Educational Expectation.

1968 Expectation	1966 Expectation				
	College + Addl. Study (N=19)	College Graduate (N=34)	Jr. College Graduate (N=7)	High School + Voc. Training (N=22)	Quit High School (N=5)
	Percent				
College + Additional Study	(16)	3	0	2	0
College Graduate	47	(41)	14	14	0
Jr. College Graduate	16	18	(14)	14	0
High School + Vocational Training	11	35	29	(28)	40
High School Graduate	10	3	43	24	60
Total	100	100	100	100	100